REMARKS

The claims in the application are 2-10 and claims 11 and 12 added by the present amendment.

Favorable reconsideration of the application as amended is respectfully requested.

Independent claim 6 has been amended to incorporate recitation from claim 2, while claims 3-5 have been appropriately amended to reflect dependency from independent claim 6. Claims 8 and 10 have been amended for formal reasons, while claim 11 finds support throughout the present application. In particular, support for the step of separately ejecting the color inks (recited in claims 11 and 12) is found, for example, on page 8, line 23 to page 9, line 3 of the filed application (or in paragraph [0037] of the published application, US 2004/0160500). Further support is provided on page 2, lines 3-12 of the background section of the filed application (or in paragraphs [0004-0005] of the published application) in which some of the serious drawbacks of ejecting mixed color inks are discussed.

The Examiner's rejection of Claims 1-5 has been rendered moot in view of the amendment herein. In the Office Action, the Examiner rejected Claims 6-10 under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,391,388 to Hilgenfeld et al. in view of Japanese Patent No. JP 2001-081363 to Oishi et al. The Examiner contends Hilgenfeld et al. teach a printing method using an ink set according to the claimed invention to form an image on a base material and thereafter performing baking. The Examiner acknowledges Hilgenfeld et al. do not teach ink jet printing, an ink receptor layer formed using glass frit on a surface of a base material prior to ink jet recording, or simultaneous baking of all of the inorganic pigments after the printing and image formation by a single baking operation, but considers Oishi et al. as teaching the foregoing deficiencies of Hilgenfeld et al.

However, it is respectfully submitted the present invention as recited in all pending claims herein, is neither disclosed nor suggested by the applied art for the following reasons.

The present invention is directed to improved ink jet printing avoiding discoloration upon baking. Previously, baking of each particular color pigment had to be carried out to avoid discoloration, which was time-consuming. However, the present invention explicitly provides ink jet printing of superiorly clear images not subject to discoloration during baking, permitting representation of intermediate colors having a wider color region.

These and other advantages are explicitly attained by the present invention as recited in independent Claim 6 which is directed to an ink jet printing method comprising the steps of printing upon a base material, at least four color inks of inorganic pigments comprising both magenta ink of gold purple and red ink of cadmium red as the red component, yellow ink and cyan ink (followed by baking). Preferably, at least five color inks are used (Claim 11), while the respective inks are separately ejected upon the base material from one another (Claims 11 and 12).

The comparative evidence presented in Tables 1 and 2 on page 24 of the present application documents the explicit improvement in color representation and image impression when printing at least a four color ink set comprising the claimed combination of inks (Examples 1-3) over printing of inks not comprising the claimed combination (Comparative Examples 1 and 2). The applied art fails to teach or suggest the claimed features and documented advantages, for the following reasons.

As acknowledged in the Office Action, Hilgenfeld et al fail to teach or suggest ink jet printing. Moreover, in Hilgenfeld et al, the specific printing inks are mixed in advance of application (please see Example 1 at column 5, line 53). In conventional screen printing as disclosed in this reference, it is necessary to mix the primary colors in advance to obtain desired coloring. Accordingly, Hilgenfeld et al, either alone or in combination with Oishi et al, actually teach away from the present invention as claimed.

Oishi et al simply disclose an ink jet printing but are silent on the particular red inorganic pigments used, and therefore fail to even recognize specific advantages might be obtained by combining specific types of red pigment components in ink jet printing, as documented by the comparative testing in the present application. Therefore, Oishi et al add

nothing to Hilgenfeld et al which would render obvious the presently claimed invention.

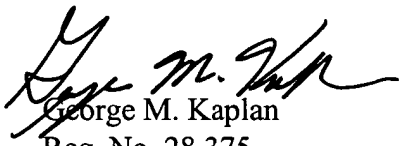
To summarize, neither Hilgenfeld et al. nor Oishi et al. teach or suggest the color inks can be separately applied onto a base material. Furthermore, neither Hilgenfeld et al. nor Oishi et al. provide any motivation, alone or in combination, to a person of ordinary skill in the art to separately eject color inks from one another to obtain the documented advantages herein. In fact, as commonly practiced in the art, both Hilgenfeld et al. and Oishi et al. teach mixing of the printing inks prior to applying them onto a base material. For example, please see column 4, lines 47-48 of Hilgenfeld et al. and the Abstract, lines 10-11 of Oishi et al., both of which clearly disclose mixing of printing inks before application onto a base material.

The remaining art of record has not been applied against the claims and will not be commented upon further at this time.

In view of the above amendments and remarks, it is respectfully submitted all pending claims herein are in condition of allowance. Should the Examiner have any questions, it is respectfully requested that he contact the undersigned attorney. A certified copy of priority Japanese Application No. 2003-033066 is enclosed.

Early favorable action is earnestly solicited.

Respectfully submitted,



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